# Clinical Endocrinology

Edited by A. Colao W. F. Young S. J. Judd J. A. Franklyn P. M. Stewart

Associate Editors J. Newell-Price J. Webster

Medical Statistician R. L. Holder A. C. Kimber

Volume 62 2005



Blackwell Publishing Ltd: 9600 Garsington Road, Oxford OX4 2DQ, UK
Blackwell Publishing, Inc.: Commerce Place, 350 Main Street, Malden, Massachusetts 02148-5018, USA
Blackwell Publishing Asia: 550 Swanston Street, Carlton South, Victoria 3053, Australia
Blackwell Verlag: Kurfürstendamm 58, 10707 Berlin, Germany
Blackwell Munksgaard: 1 Rosenørns Allé, PO Box 227, DK-1502 Copenhagen V, Denmark
Blackwell Publishing Japan/Blackwell Publishing Asia, Tokyo Office: 5F, GS Chiyoda
Building, 3-11-14 Lidabashi, Chiyoda-ku, Tokyo 102-0072, Japan
Blackwell Publishing Professional: 2121 State Avenue, Ames, IA 50014-8300, USA

© 2005 Blackwell Publishing Ltd. Authorization to photocopy for internal or personal use or the internal or personal use of specific clients is granted by Blackwell Science Ltd for libraries and other users registered with the Copyright Clearance Center (CCC) Transactional Reporting Service, provided that the base fee of \$15.00 per copy is paid directly to the CCC, 222 Rosewood Drive, Suite 910, Danvers, MA 01923, USA. This consent does not extend to other kinds of copying, such as copying for general distribution for advertising or promotional purposes, for creating new collective works or for resale. Special requests should be addressed to the Editor. 0300-0664/02 \$15.00.

ISSN 0300-0664

## Contents

Volume 62, Number 1, January 2005

#### Review

 Ghrelin: more than a natural GH secretagogue and/or an orexigenic factor: E. GHIGO, F. BROGLIO, E. ARVAT, M. MACCARIO, M. PAPOTTI AND G. MUCCIOLI

#### **Original Articles**

- 18 The impact of idiopathic childhood-onset growth hormone deficiency (GHD) on bone mass in subjects without adult GHD: M. LANGE, J. MÜLLER, O. L. SVENDSEN, K. W. KASTRUP, A. JUUL AND U. FELDT-RASMUSSEN
- 24 Serum antibodies to collagen XIII: a further good marker of active Graves' ophthalmopathy: A. DE BELLIS, D. SANSONE, C. CORONELLA, M. CONTE, S. IORIO, S. PERRINO, M. BATTAGLIA, G. BELLASTELLA, J. R. WALL, A. BELLASTELLA AND A. BIZZARRO
- 30 Ghrelin and adiponectin in patients with Cushing's disease before and after successful transsphenoidal surgery: R. LIBÈ, P. S. MORPURGO, V. CAPPIELLO, A. MAFFINI, S. BONDIONI, M. LOCATELLI, M. ZAVANONE, P. BECK-PECCOZ AND A. SPADA
- 37 Increased levels of serum advanced glycation end-products in women with polycystic ovary syndrome: E. DIAMANTI-KANDARAKIS, C. PIPERI, A. KALOFOUTIS AND G. CREATSAS
- 44 Reduced insulin sensitivity and the presence of cardiovascular risk factors in short prepubertal children born small for gestational age (SGA): N. J. T. ARENDS, V. H. BOONSTRA, H. J. DUIVENVOORDEN, P. L. HOFMAN, W. S. CUTFIELD AND A. C. S. HOKKEN-KOELEGA
- 51 Impaired circulating glucagon-like peptide-1 response to oral glucose in women with previous gestational diabetes: s. forbes, m. moonan, s. robinson, v. anyaoku, m. patterson, K. G. murphy, m. a. ghatei, s. r. bloom and d. G. Johnston
- 56 Androgen receptor gene expression in leucocytes is hormonally regulated: implications for gender differences in disease pathogenesis: M. A. SADER, K. C. Y. MCGRATH, M. D. HILL, K. F. BRADSTOCK, M. JIMENEZ, D. J. HANDELSMAN, D. S. CELERMAJER AND
- 64 Normal, bound and nonbound testosterone levels in normally ageing men: results from the Massachusetts Male Ageing Study: B. A. MOHR, A. T. GUAY, A. B. O'DONNELL AND J. B. MCKINLAY
- 74 Altered ghrelin and peptide YY responses to meals in bulimia nervosa: S. KOJIMA, T. NAKAHARA, N. NAGAI, T. MURANAGA, M. TANAKA, D. YASUHARA, A. MASUDA, Y. DATE, H. UENO, M. NAKAZATO AND T. NARUO
- 79 The impact of acute elevation of non-esterified fatty acids on insulin sensitivity and secretion in women with former gestational diabetes: K. A. MCLACHLAN AND F. P. ALFORD

- 85 Rosiglitazone improves insulin sensitivity and glucose tolerance in subjects with impaired glucose tolerance: Y.-J. HUNG, C.-H. HSIEH, D. PEI, S.-W. KUO, J.-T. LEE, L.-Y. WU, C.-T. HE, C. H. LEE, S. C. FAN AND W. H.-H. SHEU
- 92 Circulating osteoprotegerin and receptor activator of NF-KB ligand system are associated with bone metabolism in middle-aged males: K. W. OH, E. J. RHEE, W. Y. LEE, S. W. KIM, K. H. BAEK, M. I. KANG, E. J. YUN, C. Y. PARK, S. H. IHM, M. G. CHOI, H. J. YOO AND S. W. PARK
- 99 A controlled, prospective study of neuropsychological outcomes post parathyroidectomy in primary hyperparathyroid patients: C. Y. CHIANG, D. G. ANDREWES, D. ANDERSON, M. DEVERE, I. SCHWEITZER AND I. D. ZAIAC
- 105 The effects of five-year growth hormone replacement therapy on muscle strength in elderly hypopituitary patients: G. GÖTHERSTRÖM, B.-Å. BENGTSSON, K. S. SUNNERHAGEN, G. JOHANNSSON AND J. SVENSSON
- 114 Ageing and plasma adiponectin concentration in apparently healthy males and females: M. ADAMCZAK, E. RZEPKA, J. CHUDEK AND A. WIECEK

#### **Authors Declaration**

## Instructions for authors

Volume 62, Number 2, February 2005

### Commentary

119 Is stimulation of thyroglobulin (Tg) useful in low-risk patients with thyroid carcinoma and undetectable Tg on thyroxin and negative neck ultrasound?:
M. SCHLUMBERGER

- 121 Is stimulation of thyroglobulin (Tg) useful in low-risk patients with thyroid carcinoma and undetectable Tg on thyroxin and negative neck ultrasound?: P. w. s. do ROSÁRIO, M. A. RIBEIRO BORGES, T. A. FAGUNDES, A. C. H. MESSIAS FRANCO AND S. PURISCH
- 126 Tryptophan 64 → arginine polymorphism of β-3adrenergic receptor in Chilean women with polycystic ovary syndrome: F. PÉREZ-BRAVO, B. ECHIBURÚ, M. MALIQUEO, J. L. SANTOS AND T. SIR-PETERMANN
- 132 Substitutions in the CYP21A2 promoter explain the simple-virilizing form of 21-hydroxylase deficiency in patients harbouring a P30L mutation: R. S. ARAUJO, A. E. C. BILLERBECK, G. MADUREIRA, B. B. MENDONCA AND T. A. S. S. BACHEGA

- 137 Increasing urine albumin excretion is associated with growth hormone hypersecretion and reduced clearance of insulin in adolescents and young adults with type 1 diabetes: The Oxford Regional Prospective Study: R. AMIN, R. M. WILLIAMS, J. FRYSTYK, M. UMPLEBY, D. MATTHEWS, H. ORSKOY, R. N. DALTON AND D. B. DUNGER
- 145 Measuring disease activity to predict therapeutic outcome in Graves' ophthalmopathy: C. B. TERWEE, M. F. PRUMMEL, M. N. GERDING, G. J. KAHALY, F. W. DEKKER AND W. M. WIERSINGA
- 156 Changing trends in incidence and mortality of thyroid cancer in Scotland: R. M. REYNOLDS, J. WEIR, D. L. STOCKTON, D. H. BREWSTER, T. C. SANDEEP AND M. W. J. STRACHAN
- 163 Mutation analysis of POUF-1, PROP-1 and HESX-1 show low frequency of mutations in children with sporadic forms of combined pituitary hormone deficiency and septo-optic dysplasia: L. A. RAINBOW, S. A. REES, M. G. SHAIKH, N. J. SHAW, T. COLE, T. G. BARRETT AND J. M. W. KIRK
- 169 Detection of an MEN1 gene mutation depends on clinical features and supports current referral criteria for diagnostic molecular genetic testing: S. ELLARD, A. T. HATTERSLEY, C. M. BREWER AND B. VAIDYA
- 176 Different responses to chronic somatostatin analogues in patients with central hyperthyroidism: D. MANNAVOLA, I. PERSANI, G. VANNUCCHI, M. ZANARDELLI, L. FUGAZZOLA, U. VERGA, M. FACCHETTI AND P. BECK-PECCOZ
- 182 Insulin sensitivity is impaired in adults with varying degrees of GH deficiency: R. D. MURRAY AND S. M. SHALET
- 189 Free and bound plasma leptin in normal weight and obese men and women: relationship with body composition, resting energy expenditure, insulin-sensitivity, lipid profile and macronutrient preference: P. MAGNI, A. LIUZZI, M. RUSCICA, E. DOZIO, S. FERRARIO, I. BUSSI, A. MINOCCI, A. CASTAGNA, M. MOTTA AND G. SAVIA
- 197 High prevalence of long-term cardiovascular, neurological and psychosocial morbidity after treatment for craniopharyngioma: A. M. PEREIRA, E. M. SCHMID, P. J. SCHUTTE, J. H. C. VOORMOLEN, N. R. BIERMASZ, S. W. VAN THIEL, E. P. M. CORSSMIT, J. W. A. SMIT, F. ROELFSEMA AND J. A. ROMIJN
- 205 Evidence for increased ovarian follicular activity in girls with premature thelarche: P. M. CROFTON, N. E. M. EVANS, B. WARDHAUGH, N. P. GROOME AND C. J. H. KELNAR
- 210 The long-term efficacy of conventional radiotherapy in patients with GH-secreting pituitary adenomas:
  G. MINNITI, M.-L. JAFFRAIN-REA, M. OSTI, V. ESPOSITO,
  A. SANTORO, F. SOLDA, P. GARGIULO, G. TAMBURRANO AND
  R. M. ENRICI
- 217 Preserved inhibitory effect of recurrent hypoglycaemia on the male gonadotrophic axis: K. M. OLTMANNS, A. PETERS, W. KERN, H. L. FEHM, J. BORN AND B. SCHULTES
- 223 Tetraplegic subjects have hyperleptinaemia with marked circadian variation: N. HJELTNES, P. DE GROOT, K. I. BIRKELAND, J. A. FALCH AND P. O. IVERSEN
- 228 Effect of aromatase inhibition on lipids and inflammatory markers of cardiovascular disease in elderly men with low

- testosterone levels: R. H. Dougherty, J. L. Rohrer, D. Hayden, S. D. Rubin and B. Z. Leder
- 236 Metastasis to the thyroid diagnosed by fine-needle aspiration biopsy: T. Y. KIM, W. B. KIM, G. GONG, S. J. HONG AND Y. K. SHONG
- 242 Serum concentrations of leptin, adiponectin and resistin, and their relationship with cardiovascular disease in patients with end-stage renal disease: J. J. Díez, P. IGLESIAS, M. J. FERNÁNDEZ-REYES, A. AGUILERA, M. A. BAJO, P. ALVAREZ-FIDALGO, R. CODOCEO AND R. SELGAS
- 250 Changes in thyroid hormone state in children receiving chemotherapy: H. M. VAN SANTEN, N. M. THONISSEN, J. DE KRAKER AND T. VULSMA
- 258 Letters to the editors

## **Authors Declaration**

## Instructions for authors

Volume 62, Number 3, March 2005

## Commentary

263 Male testosterone: what is normal?: E. BARRETT-CONNOR

#### Review

265 Vitamin D and the elderly: L. MOSEKILDE

- 282 The value of an acute octreotide suppression test in predicting long-term responses to depot somatostatin analogues in patients with active acromegaly: N. KARAVITAKI, I. BOTUSAN, S. RADIAN, M. COCULESCU, H. E. TURNER AND J. A. H. WASS
- 289 Polycystic ovarian syndrome: marked differences between endocrinologists and gynaecologists in diagnosis and management: A. J. CUSSONS, B. G. A. STUCKEY, J. P. WALSH, V. BURKE AND R. J. NORMAN
- 296 Comparison of the relationship of age and beta cell function in three ethnic groups: κ. C. CHIU, D. S. MARTINEZ AND A. CHU
- 303 Prospective screening for coeliac disease in patients with Graves' hyperthyroidism using anti-gliadin and tissue transglutaminase antibodies: C. L. CH'NG, M. BISWAS, A. BENTON, M. K. JONES AND J. G. C. KINGHAM
- 307 An update on the biochemical diagnosis of congenital ACTH insufficiency: A. MEHTA, P. C. HINDMARSH AND M. T. DATTANI
- 315 Gender differences in growth hormone response to exercise before and after rhGH administration and the effect of rhGH on the hormone profile of fit normal adults: M. G. GIANNOULIS, M. A. BOROUJERDI, J. POWRIE, R. DALL, R. NAPOLI, C. EHRNBORG, C. PENTECOST, A. CITTADINI, J. O. L. JØRGENSEN AND P. H. SONKSEN on behalf of the GH-2000 Study Group

- 323 Determination of large bowel length and loop complexity in patients with acromegaly undergoing screening colonoscopy: A. G. RENEHAN, J. E. PAINTER, G. D. BELL, R. S. ROWLAND, S. T. O'DWYER AND S. M. SHALET
- 331 Outcome of radioiodine-131 therapy in hyperfunctioning thyroid nodules: a 20 years' retrospective study: C. CECCARELLI, W. BENCIVELLI, P. VITTI, L. GRASSO AND A. PINCHERA
- 336 Novel mutations in the MEN1 gene in subjects with multiple endocrine neoplasia-1: T.-S. JAP, C.-Y. CHIU, J. G.-S. WON, Y.-C. WU AND H.-S. CHEN
- 343 Normal opioid tone and hypothalamic-pituitary-adrenal axis function in chronic fatigue syndrome despite marked functional impairment: w. J. INDER, T. C. R. PRICKETT AND R. T. MULDER
- 349 The changes in circulating osteoprotegerin after hormone therapy in postmenopausal women and their relationship with oestrogen responsiveness on bone: k. o. han, J. T. CHOI, H. A. CHOI, I. G. MOON, C. H. YIM, W. K. PARK, H. K. YOON AND I. K. HAN
- 354 β-Cell dysfunction and low insulin clearance in insulinresistant human immunodeficiency virus (HIV)-infected patients with lipodystrophy: s. B. HAUGAARD, O. ANDERSEN, A. VØLUND, B. R. HANSEN, J. IVERSEN, U. B. ANDERSEN, J. O. NIELSEN AND S. MADSBAD
- 362 No association of the codon 55 methionine to valine polymorphism in the SUMO4 gene with Graves' disease: C. E. JENNINGS, C. J. OWEN, V. WILSON AND S. H. S. PEARCE
- 366 Neonatal leptin levels are strongly associated with female gender, birth length, IGF-I levels and formula feeding: E. PETRIDOU, C. S. MANTZOROS, M. BELECHRI, A. SKALKIDOU, N. DESSYPRIS, E. PAPATHOMA, H. SALVANOS, J. H. LEE, S. KEDIKOGLOU, G. CHROUSOS AND D. TRICHOPOULOS
- 372 Growth hormone deficiency and coeliac disease: an unusual association?: M. BOZZOLA, D. GIOVENALE, E. BOZZOLA, C. MEAZZA, M. MARTINETTI, C. TINELLI AND G. R. CORAZZA
- 376 Neck recurrence from thyroid carcinoma: serum thyroglobulin and high-dose total body scan are not reliable criteria for cure after radioiodine treatment: A. BACHELOT, S. LEBOULLEUX, E. BAUDIN, D. M. HARTL, B. CAILLOU, J. P. TRAVAGLI AND M. SCHLUMBERGER
- 380 The relative importance of genetic and environmental factors in the aetiology of thyroid nodularity: a study of healthy Danish twins: P. S. HANSEN, T. H. BRIX, F. N. BENNEDBÆK, S. J. BONNEMA, I. IACHINE, K. O. KYVIK AND L. HEGEDÜS

## 387 Corrigendum

Volume 62, Number 4, April 2005

#### Review

389 The evolution of endocrinology: J. D. WILSON

- 397 Craniopharyngiomas in children and adults: systematic analysis of 121 cases with long-term follow-up: N. KARAVITAKI, C. BRUFANI, J. T. WARNER, C. B. T. ADAMS, P. RICHARDS, O. ANSORGE, B. SHINE, H. E. TURNER AND J. A. H. WASS
- 410 Clinical indicators of biochemical remission in acromegaly: does incomplete disease control always mean therapeutic failure?: s. s. damjanovic, a. n. neskovic, milan S. PETAKOV, V. POPOVIC, D. MACUT, P. VUKOJEVIC AND M. M. JOKSIMOVIC
- 418 Novel missense mutations, GCC [Ala306] -> GTC [Val] and ACG [Thr318] -> CCG [Pro], in the CYP11B1 gene cause steroid 11β-hydroxylase deficiency in the Chinese: H.-H. LEE, G.-S. WON, H.-T. CHAO, Y.-J. LEE AND B.-C. CHUNG
- 423 Correlation between severity of thyroid dysfunction and renal function: J. G. DEN HOLLANDER, R. W. WULKAN, M. J. MANTEL AND A. BERGHOUT
- 428 Growth hormone response to arginine test distinguishes multiple system atrophy from Parkinson's disease and idiopathic late-onset cerebellar ataxia: м. т. РЕLLЕССНІА, R. PIVONELLO, E. SALVATORE, A. FAGGIANO, P. BARONE, G. DE MICHELE, G. LOMBARDI, A. COLAO AND A. FILLA
- 434 Circulating levels of angiogenic cytokines can predict tumour progression and prognosis in neuroendocrine carcinomas: M. E. PAVEL, G. HASSLER, U. BAUM, E. G. HAHN, T. LOHMANN AND D. SCHUPPAN
- 444 Proportion of various types of thyroid disorders among newborns with congenital hypothyroidism and normally located gland: a regional cohort study: R. GAUDINO, C. GAREL, P. CZERNICHOW AND J. LÉGER
- 449 Supraphysiological growth hormone: less fat, more extracellular fluid but uncertain effects on muscles in healthy, active young adults: C. EHRNBORG, L. ELLEGÅRD, I. BOSAEUS, B.-Å. BENGTSSON AND T. ROSÉN
- 458 Genotypes of the pancreatic β-cell K-ATP channel and clinical phenotypes of Japanese patients with persistent hyperinsulinaemic hypoglycaemia of infancy: к. онкиво, M. NAGASHIMA, Y. NAITO, T. TAGUCHI, S. SUITA, N. OKAMOTO, H. FUJINAGA, K. TSUMURA, K. KIKUCHI AND J. ONO
- 466 Final adult height and body mass index after cure of paediatric Cushing's disease: J. H. DAVIES, H. L. STORR, K. DAVIES, J. P. MONSON, G. M. BESSER, F. AFSHAR, P. N. PLOWMAN, A. B. GROSSMAN AND M. O. SAVAGE
- 473 Growth hormone replacement reduces C-reactive protein and large-artery stiffness but does not alter endothelial function in patients with adult growth hormone deficiency: R. W. MCCALLUM, C. A. R. SAINSBURY, A. SPIERS, A. F. DOMINICZAK, J. R. PETRIE, N. SATTAR AND J. M. C. CONNELL
- 480 Prevalence and progression of subclinical hypothyroidism in women with type 2 diabetes: the Fremantle Diabetes Study: S. A. P. CHUBB, W. A. DAVIS, Z. INMAN AND T. M. E. DAVIS
- 487 Relationship of thyroid function with body mass index, leptin, insulin sensitivity and adiponectin in euthyroid obese women: G. IACOBELLIS, M. C. RIBAUDO, A. ZAPPATERRENO, C. V. IANNUCCI AND F. LEONETTI

- VI
- 492 PROGINS Alu sequence insertion is associated with hyperprolactinaemia but not leiomyoma susceptibility: Y.-Y. HSIEH, I.-P. CHAN, H.-I. WANG, C.-C. CHANG, C.-W. HUANG AND C.-S. LIN
- 498 Serum levels of sex hormone-binding globulin (SHBG) are not associated with lower levels of non-SHBG-bound testosterone in male newborns and healthy adult men: W. DE RONDE, Y. T. VAN DER SCHOUW, F. H. PIERIK, H. A. P. POLS, M. MULLER, D. E. GROBBEE, L. J. G. GOOREN, R. F. A. WEBER AND F. H. DE JONG
- 504 The expression of messenger RNA for ADP-ribosyl cyclase in aldosterone-producing adenomas: Y. TAKEDA, M. USUKURA, T. YONEDA, N. ODA, Y. ITO AND H. MABUCHI

## **Rapid Publication**

509 Investigation of BRAF mutation in a series of papillary thyroid carcinoma and matched-lymph node metastasis reveals a new mutation in metastasis: G. OLER, K. N. EBINA, P. MICHALUART JR, E. T. KIMURA AND J. CERUTTI

#### **Authors Declaration**

#### Instructions for authors

Volume 62, Number 5, May 2005

## Review

513 Mineralocorticoid resistance: p. s. GELLER

- 521 The effect of combination therapy with propylthiouracil and cholestyramine in the treatment of Graves' hyperthyroidism: w.-c. tsai, d. pei, t.-f. wang, d.-a. wu, J.-c. li, C. L. wei, C.-H. Lee, S.-P. Chen and S.-W. Kuo
- 525 Prevalence of hypopituitarism and growth hormone deficiency in adults long-term after severe traumatic brain injury: A. LEAL-CERRO, J. M. FLORES, M. RINCON, F. MURILLO, M. PUJOL, F. GARCIA-PESQUERA, C. DIEGUEZ AND F. F. CASANUEVA
- 533 Expression of growth hormone-releasing hormone receptor splicing variants in human primary adrenocortical tumours: s. FREDDI, G. ARNALDI, F. FAZIOLI, M. SCARPELLI, G. APPOLLONI, T. MANCINI, B. KOLA, X. BERTAGNA, F. MANTERO, R. COLLU AND M. BOSCARO
- 539 Effects of small intestinal and gastric glucose administration on the suppression of plasma ghrelin concentrations in healthy older men and women:

  B. A. PARKER, S. DORAN, J. WISHART, M. HOROWITZ AND J. M. CHAPMAN
- 547 Novel mutations in epithelial sodium channel (ENaC) subunit genes and phenotypic expression of multisystem pseudohypoaldosteronism: O. EDELHEIT, I. HANUKOGLU, M. GIZEWSKA, N. KANDEMIR, Y. TENENBAUM-RAKOVER, M. YURDAKÖK, S. ZAJACZEK AND A. HANUKOGLU

- 554 Ghrelin and its relationship to growth hormones during normal pregnancy: J. FUGLSANG, C. SKJÆRBÆK, U. ESPELUND, J. FRYSTYK, S. FISKER, A. FLYVBJERG AND P. OVESEN
- 560 A retrospective study of growth hormone use in adolescents with cystic fibrosis: D. S. HARDIN, T. FERKOL, C. AHN, D. DREIMANE, M. DYSON, M. MORSE, C. PRESTIDGE, J. RICE AND D. K. SEILHEIMER
- 567 Adiponectin, acylation stimulating protein and complement C3 are altered in obesity in very young children: K. CIANFLONE, H.L. LU, J. SMITH, W. YU AND H.W. WANG
- 573 The peroxisome proliferator activated receptor gamma Pro12Ala polymorphism is associated with a lower hirsutism score and increased insulin sensitivity in women with polycystic ovary syndrome: s. HAHN, A. FINGERHUT, U. KHOMTSIV, L. KHOMTSIV, S. TAN, B. QUADBECK, B. L. HERRMANN, B. KNEBEL, D. MÜLLER-WIELAND, K. MANN AND O. E. JANSSEN
- 580 Are thyroid peroxidase antibodies associated with cardiovascular disease risk in patients with subclinical hypothyroidism?: B. J. WELLS AND W. J. HUESTON
- 585 Arg16Gly polymorphism in β2-adrenergic receptor gene is not associated with thyrotoxic periodic paralysis in Korean male patients with Graves' disease: т. Ү. КІМ, J. Ү. SONG, W. B. КІМ AND Y. К. SHONG
- 590 Improvement of intrinsic myocardial contractility and cardiac fibrosis degree in acromegalic patients treated with somatostatin analogues: a prospective study: F. BOGAZZI, V. DI BELLO, C. PALAGI, M. G. D. DONNE, A. DI CORI, S. GAVIOLI, E. TALINI, C. COSCI, C. SARDELLA, S. BROGIONI, M. MARIANI AND E. MARTINO
- 597 Evaluation of GH reserve in patients with adrenal incidentalomas and biochemical evidence of subclinical autonomous glucocorticoid hypersecretion: M. TZANELA, D. ZIANNI, CH. STYLIANIDOU, N. KARAVITAKI, S. TSAGARAKIS AND N. C. THALASSINOS
- 603 Mutational analysis of *PPARG* as a candidate tumour suppressor gene in enteropancreatic endocrine tumours:

  J. COSTA-GUDA, E. D. ROSEN, R. T. JENSEN, D. C. CHUNG AND

  A. ARNOLD.
- 607 The effect of plasminogen activator inhibitor-1 gene 4G/5G polymorphism on glucose and lipid metabolisms in Turkish obese children: S. T. KINIK, F. B. ATAÇ, H. VERDI, S. ÇETINTAŞ, F. İ. ŞAHIN AND N. ÖZBEK
- 611 Glycodelin responses to hyperinsulinaemic clamp vary according to basal serum glycodelin concentration:

  M. SEPPÄLÄ, E. MANDELIN, R. KOISTINEN, R. BERGHOLM,
  M. TIIKKAINEN AND H. YKI-IÄRVINEN
- 616 Effect of growth hormone and 17β-oestradiol treatment on metabolism and body composition in girls with Turner syndrome: C. H. GRAVHOLT, B. E. HJERRILD, R. W. NAERAA, F. ENGBAEK, L. MOSEKILDE AND I. S. CHRISTIANSEN
- 623 A new sustained-release preparation of human growth hormone and its pharmacokinetic, pharmacodynamic and safety profile: A. JOSTEL, A. MUKHERJEE, J. ALENFALL, L. SMETHURST AND S. M. SHALET

628 Growth hormone releasing hormone plus arginine stimulation testing in young adults treated in childhood with cranio-spinal radiation therapy: J. N. HAM, J. P. GINSBERG, C. D. HENDELL AND T. MOSHANG JR

### **Authors Declaration**

#### Instructions for authors

Volume 62, Number 6, June 2005

#### Review

633 Clinical relevance of macroprolactin: J. Gibney, T. P. Smith and T. J. McKenna

## **Original Articles**

- 644 Prevalence of adrenal androgen excess in patients with the polycystic ovary syndrome (PCOS): A. KUMAR, K. S. WOODS, A. A. BARTOLUCCI AND R. AZZIZ
- 650 The effect of atorvastatin on serum lipoproteins in acromegaly: M. MISHRA, P. DURRINGTON, M. MACKNESS, K. W. SIDDALS, K. KAUSHAL, R. DAVIES, M. GIBSON AND D. W. RAY
- 656 The pattern of growth hormone secretion during the menstrual cycle in normal and depressed women:
  J. Z. KASA-VUBU, E. V. DIMARAKI AND E. A. YOUNG
- 661 Morning cortisol does not mediate the association of size at birth with blood pressure in children born from full-term pregnancies: I. KOUPIL, V. MANN, D. A. LEON, U. LUNDBERG, L. BYBERG AND D. VÅGERÖ
- 667 Growth hormone secretion in adult patients with thalassaemia: C. LA ROSA, V. DE SANCTIS, A. MANGIAGLI, M. MANCUSO, V. GUARDABASSO, M. C. GALATI AND M. CARUSO-NICOLETTI
- 672 Decreased type 1 iodothyronine deiodinase expression might be an early and discrete event in thyroid cell dedifferentation towards papillary carcinoma: E. L. DE SOUZA MEYER, J. MIGUEL DORA, M. S. WAGNER AND A. LUIZA MAIA
- 679 Lymphoid tyrosine phosphatase (PTPN22/LYP) variant and Graves' disease in a Polish population: association and gene dose-dependent correlation with age of onset: A. SKÓRKA, T. BEDNARCZUK, E. BAR-ANDZIAK, J. NAUMAN AND R. PLOSKI
- 683 Higher bone mineral density in Caucasian, hirsute patients of reproductive age. Positive correlation of testosterone levels with bone mineral density in hirsutism: D. GLINTBORG, M. ANDERSEN, C. HAGEN AND A. P. HERMANN

- 692 Circulating cortisone levels are associated with biochemical markers of bone formation and lumbar spine BMD: the Hertfordshire Cohort Study: M. S. COOPER, H. E. SYDDALL, C. H. D. FALL, P. J. WOOD, P. M. STEWART, C. COOPER AND E. M. DENNISON
- 698 Adult growth hormone replacement therapy and neuroimaging surveillance in brain tumour survivors:

  A. JOSTEL, A. MUKHERJEE, P. A. HULSE AND S. M. SHALET
- 706 The effects of 12 months of growth hormone replacement therapy on cardiac autonomic tone in adults with growth hormone deficiency: F. Tanriverdi, N. K. ERYOL, H. ATMACA, K. UNLUHIZARCI, I. OZDOGRU, I. SARIKAYA, F. BAYRAM AND F. KELESTIMUR
- 713 A population study of the association between thyroid autoantibodies in serum and abnormalities in thyroid function and structure: I. BÜLOW PEDERSEN, P. LAURBERG, N. KNUDSEN, T. JØRGENSEN, H. PERRILD, L. OVESEN AND L. B. RASMUSSEN
- 721 Overproduction of an amino-terminal form of PTH distinct from human PTH(1–84) in a case of severe primary hyperparathyroidism: influence of medical treatment and surgery: A. RÄKEL, J.-H. BROSSARD, J.-V. PATENAUDE, C. ALBERT, E. NASSIF, T. CANTOR, L. ROUSSEAU AND P. D'AMOUR
- 728 Could associations between breastfeeding and insulin-like growth factors underlie associations of breastfeeding with adult chronic disease? The Avon Longitudinal Study of Parents and Children: R. M. MARTIN, J. M. P. HOLLY, G. D. SMITH, A. R. NESS, P. EMMETT, I. ROGERS AND D. GUNNELL for the ALSPAC Study Team
- 738 Relationship between fasting serum glucose, age, body mass index and serum 25 hydroxyvitamin D in postmenopausal women: A. G. NEED, P. D. O'LOUGHLIN, M. HOROWITZ AND B. E. C. NORDIN

#### **Rapid Publication**

- 742 The nadir growth hormone after an octreotide test dose predicts the long-term efficacy of somatostatin analogue therapy in acromegaly: J. A. GILBERT, J. P. MIELL, S. M. CHAMBERS, A. M. MCGREGOR AND S. J. B. AYLWIN
- 748 Referees
- 750 Author Index
- 759 Subject Index

**Volume Contents** 

**Authors Declaration** 

Instructions for authors